

IN THE SPECIFICATION

Please replace the paragraph commencing on page 37, line 6 with the following paragraph.

After 128 samples (in one embodiment) of data are collected of the delay spread-relative signal strength RF data measurement sample:, mobile station RX for BS-1 ~~and~~ are grouped into a quantization matrix, where rows constitute relative signal strength intervals and columns define delay intervals. ~~As e~~Each measurement row, column pair (which could be represented as a complex number or Cartesian point pair) is added to their respective values to generate a Z direction of frequency of recurring measurement value pairs or a density recurrence function. By next applying a grid function to each x, y, and z value, a three-dimensional surface grid is generated, which represents a location data value or unique print of that 128-sample measurement.

Please replace the paragraph commencing on page 94, line 30 with the following paragraph.

The path comparison module 1454 implements the following strategy: the confidence of a particular location hypothesis is to be increased (decreased) if it is (not) predicting a path that lies along a known transportation pathway (and the speed of the target MS is sufficiently high). For instance, if a time series of target MS location hypotheses for a given FOM is predicting a path of the target MS that lies along an interstate highway, the confidence of the currently active location hypothesis for this FOM should, in general, be increased. Thus, at a high level the following steps may be performed: